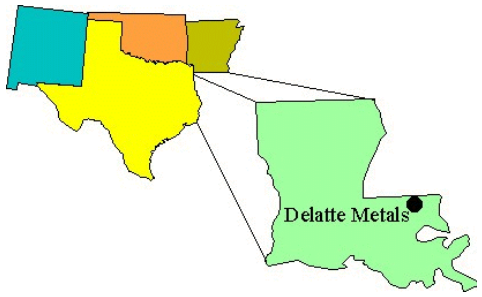
DELATTE METALS SUPERFUND SITE
Tangipahoa Parish, Louisiana

EPA Region 6
EPA ID# LAD052510344
Site ID: 0600428
State Congressional District: 1
Fact Sheet Updated: No scheduled update.



SITE DESCRIPTION

Location: The Delatte Metals (DM) Site includes the Delatte Metals, Inc. (DMI) facility and the abandoned North Ponchatoula Battery (NPB) facility and parts of off-facility areas (areas outside these facilities that have impacts of contamination). The DMI facility is located at 19113 Weinberger Road in Tangipahoa Parish about 2.5 miles southeast of Ponchatoula, Louisiana. The combined areas of the two facilities is approximately 18.9 acres. The approximate total area of the DM Site, encompassing both facility and off-facility areas, is 56.8 acres.

Population: 645 residents within 1 mile radius

Setting: The DM Site is in a rural area of Tangipahoa Parish. The DM Site consists of facility (DMI and NPB) and off-facility areas (wetlands, tributaries, Selser's Creek, Cypress Swamp, undeveloped land, and residences). Weinberger Road is south of the facility area, and south of Weinberger Road is a residential neighborhood. East of the facility area is undeveloped land containing wetlands. Immediately north of the facility area is a residential neighborhood. West of the facility area is a residence, undeveloped land containing wetlands, and Selsers Creek. West of Selsers Creek is residential property, undeveloped land, and farm land.

PRESENT STATUS AND ISSUES

- Site is currently in Operation and Maintenance under the Louisiana Department of Environmental Quality.
- The site was delisted from the NPL on August 8, 2005.

WASTES AND VOLUMES

Source piles: Several contamination source piles and facility structures were removed by EPA from winter 1998 to spring 1999. Refer to Removal Assessment Report dated April 8, 1999.

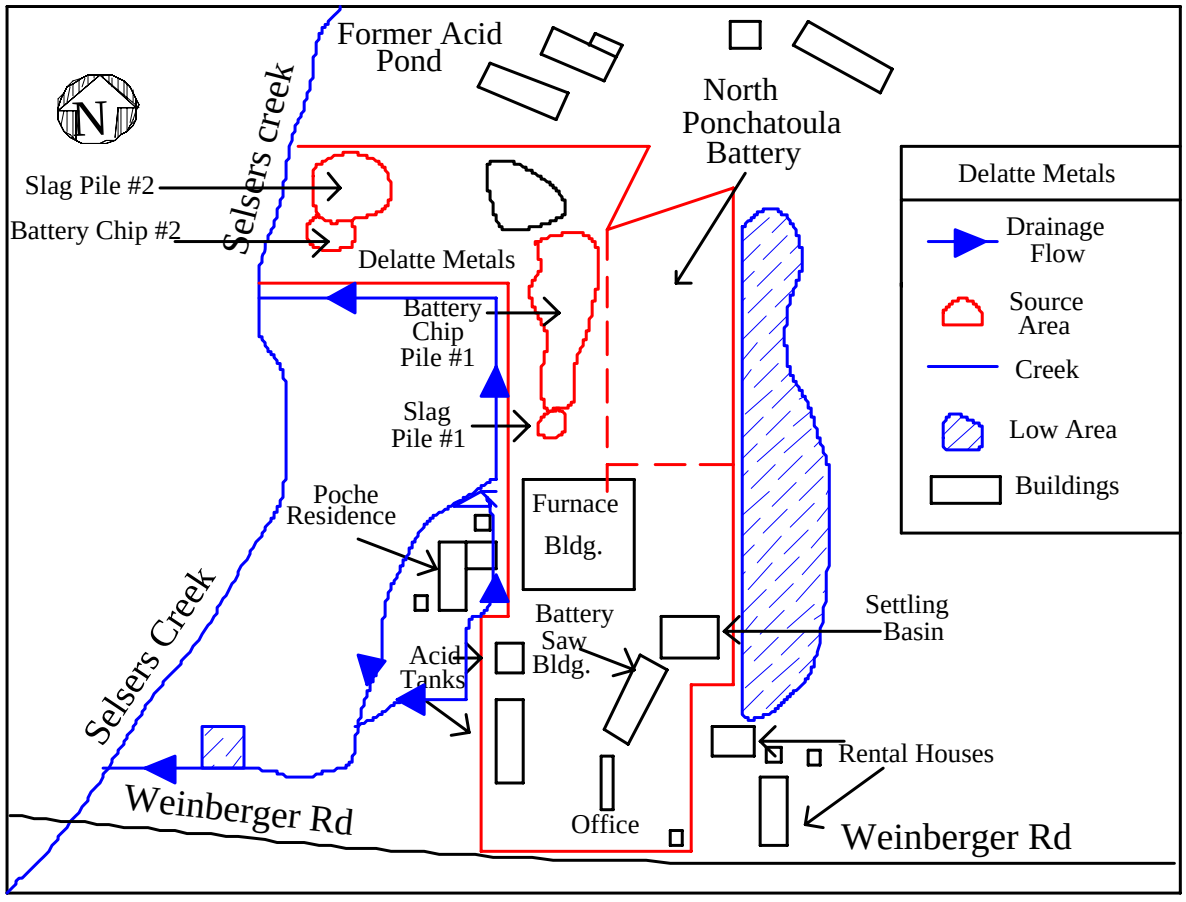
Soil: 85,444 tons of lead contaminated soil was removed during the remedial action.

Groundwater: 1st local water-bearing zone (Class 3B unusable shallow groundwater) is lead contaminated and has acidic conditions. The 3rd local water-bearing zone (Class 1B drinking water aquifer) is not contaminated.

NATIONAL PRIORITIES LIST

NPL Inclusion Proposal Date:	July 28, 1998
NPL Inclusion Final Date:	January 19, 1999
NPL Deletion Proposal Date:	n/a
NPL Deletion Final Date:	n/a

SITE MAP



SITE HISTORY

- 1960s: operating under the name Delatte and Fuscia Battery Company, battery recycling and smelting operations were conducted in the DMI facility area of the DM Site.

- Early 1980s: the facility name was changed to Delatte Metals, Inc. The operations performed at the facility included spent lead-acid battery demolition to remove associated lead plates and the subsequent lead smelting of the lead plates to produce lead ingots. The typical process at the facility involved sawing off the tops of the batteries and removing the lead plates in the battery saw building. After opening the battery cases, the battery acid was drained into a sump.

- Mid-1980s: the acid was pumped from the sump to an unlined pond located on the north side of the Site. After the closure of the acid pond, the acid was pumped through an underground pipe to the acid tank farm. The spent acid was then shipped off-site for recycling. Similar operations took place at the NPB facility.

- Mid-1980s- 1990s, Louisiana Department of Environmental Quality (LDEQ) worked with the both facilities in attempts to correct Site deficiencies in environmental practices.

- Sep. 1997: Louisiana Governor Mike Foster formally requested that the DM Site be addressed by EPA and listed on the Superfund National Priorities List (NPL).

- Jul. 1998: a Hazard Ranking System evaluation package was completed and the Site was proposed for addition to the NPL.

- Sep. 1998: EPA Region 6 began a removal action at the DMI facility. The removal activities consisted of removing above ground wastes at the DMI facility, which included piles of slag, dust, and battery chips. Other identified source areas removed from the DMI facility included the acid tank farm, furnace building, drums of metal-contaminated waste, and tote bags of baghouse dust.

- Jan. 19, 1999: EPA formally announced the addition of the DM Site to the NPL in the Federal Register.

- 1999-2000: EPA conducted field sampling and investigation activities at the DM Site including collection and analyses of soil, sediment, surface water, ground water, and animal tissue samples.

- Dec. 12, 1999: The Treatability Study was completed.

- Jan. 3, 2000: The Remedial Investigation (RI) Report was completed.

- Mar. 3, 2000: The Human Health Risk Assessment was completed.

- Mar. 16, 2000: The Ecological Risk Assessment was completed.

- May 19, 2000: The Feasibility Study (FS) Report was completed.

- Sep. 26, 2000: The EPA Record of Decision was signed.
- Jan. 29, 2001: The Final Remedial Design (engineering specifications, drawings, and blueprints for the Remedial Action) was completed.
- Sep. 17, 2002: State Superfund Contract signed by LDEQ.
- Oct. 29, 2002: The Remedial Action Kickoff Meeting and Community Informational Meeting was held in the Hammond Health Unit.
- Nov. 18, 2002: Remedial Action field mobilization begins.
- September 22, 2003: Preliminary Close Out Report signed and operational and functional period began.
- May 17, 2004: First Quarter ground water sampling report.
- May 26, 2004: Second Quarter ground water sampling report.
- July 21, 2004: Final Site Inspection
- July 27, 2004: Final Site Inspection Report.
- September 9, 2004: Third Quarter ground water sampling report.
- September 22, 2004: Final Remedial Action Report
- September 22, 2004: LDEQ files Conveyance Notices
- September 22, 2004: Operation and Maintenance began
- September 28, 2004: Fourth Quarter ground water sampling report
- September 2004: Fifth Quarter ground water sampling report
- December 14, 2004: Explanation of Significant Differences
- March 7, 2005: Final Close Out Report
- May 23, 2005: EPA signed the Deletion Documents
- June 8, 2005: The Deletion documents were published in the Federal Register. The public comment period will be June 8, 2005 through July 8, 2005.
- August 8, 2005: Site delisted from the NPL.

ENFORCEMENT HISTORY

1998: Notice letters for removal action issued to identified potentially responsible parties.

1998: Waiver of special notice for remedial investigation/feasibility study activities issued to identified PRPs.

2000: Waiver of special notice for remedial design/remedial action activities issued to identified PRPs.

HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT

- Risk Assessment Summary:

  The numerical cleanup goals are: 1,700 ppm lead (industrial), 500 ppm lead (residential), 80 ppm lead (ecological).

  Lead is the most abundant and widespread contaminant of concern at the DM Site. Since lead has been detected (co-located) at the points where the few other identified heavy metals have been detected, lead will be used as the basis for measuring numerical cleanup goals.

  The numerical cleanup goals were developed from the Adult Lead Model, the Integrated Effects Uptake Biokinetic (IEUBK) Model, and the Ecological Risk Model. These models form the basis for determination of cleanup levels that will ensure protection of human health and the environment in both facility (industrial) and off-facility (residential and ecological) areas.

  Based on the risk models, a total of 44,000 cubic yards of contaminated soil would have to be addressed at the DM Site. Included in this total is approximately 25,000 cubic yards of highly mobile lead source materials where lead contaminants were found well above acceptable risk levels even for industrial workers.

- Human Health Risks:

  Based on the field data collected, the primary contaminant at the DM Site is lead. In order to determine cleanup goals for lead in industrial and residential areas, the Adult Lead Model and IEUBK Model were used.

  The basis for the Adult Lead Model is the relationship between the soil lead concentration and the blood lead concentration in the developing fetus of adult women who have site exposures. This Adult Lead Model served as the basis for determining the numerical cleanup goal of lead in soil in the facility industrial areas.

  The basis for the IEUBK Model is the calculation of a geometric mean blood lead concentration for a typical child aged 6 months to 7 years of age, residing at a given

residence. This IEUBK Model served as the basis for determining the numerical cleanup goal of lead in soil in the off-facility residential areas.

The conclusions of the Adult Lead Model and the IEUBK Model indicate that there will be unacceptable health risks and blood lead concentrations to both an adult worker in the facility areas of the DM Site and the child in the residential off-facility areas. Therefore, cleanup of these areas designated for industrial and residential use will have to be addressed.

- Ecological Risks:

  Based on the field data collected, the primary contaminant at the DM Site is lead. Three major habitat types appear to be affected by this contaminant originating from the DM Site (1) the bottomland hardwood forest typical of that part of Tangipahoa Parish, (2) the aquatic habitat of Selsers Creek and its tributaries, and (3) the cypress swamp habitat south of Weinberger Road.

  The conclusions of the Ecological Risk Model indicate that there will be unacceptable environmental risks to both ecological receptors and natural habitats in the off-facility areas. Therefore, cleanup of the areas designated for ecological use will have to be addressed. The Ecological Risk Model served as the basis for determining the numerical cleanup goal of lead in soil in the off-facility ecological areas.

RECORD OF DECISION

ROD signature date: September 26, 2000.

The EPA ROD addresses the contamination at the DM Site by:

1. Immobilization to address the principal threat wastes in the soil (thus eliminating the source of contamination for sediment, surface water, ground water);

2. Off-site disposal to transport immobilized wastes to a disposal facility;

3. Permeable treatment walls to neutralize the acidity of the shallow ground water and limit the migration of dissolved metals;

4. Institutional controls in the form of deed notices to inform the public of Site conditions; and,

5. Ground water monitoring to ensure the effectiveness of the selected remedy.

There are highly mobile lead source materials identified at the DM Site as principal threat wastes. These materials will undergo immobilization treatment and then be transported to an off-site disposal facility. The remaining low-level threat wastes suitable for industrial reuse of the property can be reliably contained within the areas of the industrial facilities.

The installation of permeable treatment walls within the 1st local water-bearing zone will neutralize the acidity of the shallow ground water and limit the migration of dissolved metals. This will prevent any migration of soil contaminants into the viable aquifers and aid in the immobilization treatment process.

These components plus institutional controls ensure that the DM Site remedy will be protective for areas designated as industrial, residential, and ecological use. Continued ground water monitoring will verify the long-term effectiveness of this remedy.

EXPLANATION OF SIGNIFICANT DIFFERENCES

The Explanation of Significant Differences (ESD) was signed on December 14, 2004.

The major components of the ESD that have changed since the 2000 ROD are listed below. All other components of the 2002 ROD remain unchanged. The EPA issued this ESD to document the increase in cost; increase in waste volume treated and disposed; and, revisions to the cleanup values.

Cost

The final remedial action (RA) cost of $13.1 million is an increase of $3.2 million over the ROD estimate of $9.9 million. The original cost estimate to implement the remedial action described in the ROD was $9.9 million (net present worth). Costs were estimated for an anticipated 30-year Operation and Maintenance (O&M) time period and at a discount rate of 7%. More detailed cost estimate documentation can be found in the Feasibility Study. The bid price for the project was $12.2 million. The difference between the ROD estimate and the contractor bid value was due to the underestimation of costs associated with the permeable reactive barrier wall installation, required lime application, clear and grub activity, survey subcontractor costs, excavation/treatment/disposal costs, surface restoration and the need for storm water control.

Approximately $13.1 million has been expended on the RA. RA cost growth was due to change orders submitted in January, April, May, and June 2003. These orders were associated with the increase in the total volume of contaminated soil and waste excavated, treated, and disposed; the increase in the total amount of soil required for backfill; the unanticipated increase in total weight of contaminated wastes and soils; surface road failure during offsite disposal; additional site preparation (clear and grub) activity; permeable reactive barrier shoring requirements; extensive rainfall; and, rate changes associated with Site remedial activity. A breakdown of the final costs can be found in the final Remedial Action Report dated September 22, 2004.

Volume

The total volume of waste treated and disposed was 85,444 tons; this represents an increase of 32,794 tons over the estimated 52,650 tons presented in the September 26, 2000, Record of Decision (ROD). Battery wastes were encountered at depths up to 15 feet below ground surface (bgs) and at on-facility locations not previously identified. Therefore, the discovery and remediation of these new locations increased the volume of waste material that required treatment and disposal. Because these were defined as principal threat wastes, removal, treatment and disposal were necessary to eliminate the wastes as a source of contamination for sediment, surface water, and ground water and as a threat to human health and the environment.

No source materials discovered during the remedial action were left in place above the risk-based cleanup levels.

Cleanup Values

Cleanup values were established for additional on-facility and off-facility areas identified for cleanup during the remedial action. On January 8, 2003, EPA revised the cleanup criteria based on additional soil sample data collected during the RA. The purpose of this sampling was to better delineate areas designated for remediation. These data allowed areas to be more easily separated into future land use categories of ecological, residential, or industrial and then remediated based on the cleanup criteria for that particular use. Additional ecological areas not representative of drainage areas were reassessed using revised toxicity values resulting in a 200 mg/kg cleanup level for these areas.

On April 9, 2003, EPA revised the cleanup criteria for M-, P-, and Q- excavation grids since the areas were considered residential rather than ecological. These grids were located in established ecological environments. Because of intrusive remediation activities that eliminated these ecological environments and the possible reuse as residential, these areas were redefined as residential and thus required a residential cleanup value.

On May 15, 2003, EPA revised the cleanup criteria for Cypress Swamp. Weighing the detrimental effects of habitat destruction versus estimated risk in the Cypress Swamp area indicated that limiting remedial efforts to the removal of highly-contaminated sediments will serve to adequately protect current and future human health and the environment. Therefore, the sediments with concentrations greater than 500 mg/kg lead were removed to a depth of 6 inches (after removal of overlying detrital material) and back-filled with 6 inches of clean fill material. This removed a large portion of the contamination and provided a barrier to future ecological exposure to remaining contamination, while maintaining the hydrology and habitat value of the area.

COMMUNITY INVOLVEMENT

Community Relations Plan:	July 1999
Open houses and workshops:	Dec. 29, 1998; Mar. 10, 1999, Jul. 13, 2000, Oct. 29, 2002.
Formal Proposed Plan Public Meeting:	July 31, 2000
Explanation of Significant Differences:	
Public Notice:	December 23, 2004
Signature:	December 14, 2004.
Citizens on site mailing list:	200
Constituency Interest:	Nearby residents concerned about personal health and supportive of EPA efforts.
Site Repository:	Ponchatoula Branch Library, 380 N. 5th Street, Ponchatoula, LA 70454

TECHNICAL ASSISTANCE GRANT

Availability Notice:	September 2, 1998
Letters of Intent Received:	n/a

Final Application Received: n/a
Grant Award: n/a

SITE CONTACTS

EPA Remedial Project Manager:	Katrina Higgins-Coltrain	214.665.8143 or 800.533.3508
EPA Site Attorney:	Barbara Nann	214.665.2157 or 800.533.3508
EPA Regional Public Liaison:	Arnold Ondarza	800.533.3508
EPA Contractor:	Tetra Tech EM, Inc.	
LDEQ Louisiana State Contact:	Melissa Boles Ashour	225.219.3417

REALIZED CLEANUP BENEFITS

The DM Site cleanup ensures elimination, treatment, and/or prevention of contaminants that contribute to unacceptable health risks for current and future industrial workers, area residents, and ecological animals due to exposure of contaminated media at the DM Site. This cleanup is to be accomplished through a combination of the immobilization treatment process, installation of permeable treatment walls, off-site disposal of immobilized waste, institutional controls in the form of deed notices, and ground water monitoring at the DM Site.

Wastes addressed during remedial action:

- Approximately 41,000 cubic yards (cy) of on-facility and 1,400 cy of off-facility soil were excavated, treated, and disposed of at an offsite landfill. The total weight of soil disposed of at the landfill was 85,444 tons. Approximately 10,000 cy of off-facility soil meeting on-facility cleanup levels was placed in the on-facility excavations.
- An estimated 1.5 million gallons of water was treated and discharged.
- Approximately 450 tons of concrete was disposed of as hazardous waste.
- A total of 33 acres was cleared and grubbed and all trees, shrubs, and stumps were chipped and scattered on-facility.
- Miscellaneous debris encountered during the remedial effort at the site was transported to the landfill and disposed of as nonhazardous waste. Examples of miscellaneous debris include telephone poles, old tires, drums, Polyvinyl Chloride pipe, wood pieces, household trash, and other solid waste.
- Approximately 300 drums containing investigation-derived waste were disposed.
- Approximately 0.5 cy of asbestos containing material was removed from a storage building, double-bagged, and disposed as nonhazardous waste material.

Operation and Maintenance Activity:

Ground water monitoring activities will include well sampling to determine that the ground water pH downgradient of the permeable reactive barrier (PRB) is increasing, that metals concentrations in the ground water downgradient of the PRB are decreasing, and that the metals concentrations in the ground water of the third water-bearing zone are not increasing. Quarterly monitoring of the well network will be required to obtain at least eight time-independent data points that will be evaluated using statistical tools to quantitatively assess metals concentrations and pH. Intra-well trends and population trends (upgradient and downgradient) in metals

concentrations and pH will be used to evaluated the efficacy of the remedy and to recommend changes to the monitoring program, as necessary.

Routine maintenance and visual site inspections will be performed at the site to ensure the integrity of the remedial action. Inspections will be made of the monitoring network, the institutional controls limiting site reuse to industrial, and the PRB.